

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1-18 (Cancelled).

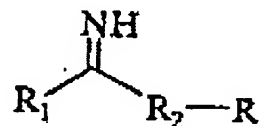
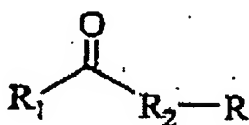
Claim 19 (Currently Amended): [[An]] A formaldehyde-free aminotriazine condensation product, such as a melamine condensation product, produced by the reaction of an aminotriazine, such as melamine, with at least one oxocarboxylic acid derivative, wherein said oxocarboxylic acid derivative has:

- at least one oxo group (-CO-) or a derivative of an oxo group of the class comprising a hemiketal, hemiacetal, imine, hemiaminal, hemiamidal, and amino derivatives thereof, and
- at least one derivative of a carboxyl group of the class comprising an ester, amide, amidine, imino ester, nitrile, anhydride, and also the imino derivatives of the anhydride

in the molecule.

Claim 20 (Currently amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein the at least one oxocarboxylic acid derivative originates from the group of the following compounds:

(II)



wherein R = ester (-CO-OR₂), amide (-CO-NH₂), substituted amide (-CO-NR₁R₂), anhydride (-CO-O-CO-R₁), nitrile (-CN), imino ester (-CNH-OR₂), amidine (-CNH-NH₂), substituted

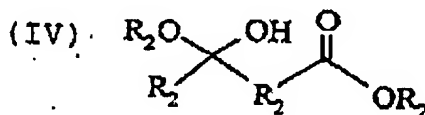
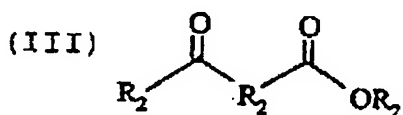
amidine (-CNH-NR₁R₂), or imino derivatives of the anhydride -CNH-O-CO-R₁, -CNH-O-CNH-R₁ and -CNH-NH-CNH-R₁,

R₁ = alkyl, alkenyl, alkynyl and/or aryl radicals and/or substituted alkyl, alkenyl, alkynyl and/or aryl radicals having up to 20 carbon atoms or hydrogen H,

R₂ = alkyl, alkenyl, alkynyl and/or aryl radicals and/or substituted alkyl, alkenyl, alkynyl and/or aryl radicals having up to 20 carbon atoms,

R₃ = -OR₁, -NH₂, -NR₁R₂, -R₁N-CO-R₁ (amide radical), -R₁N-CNH-R₁ (amidine radical), -R₁N-CN (cyanoamide radical), -R₁N-CNH-NH-CN (dicyanodiamide radical), or -R₁N-CNH-NR₁R₁ (guanidine radical).

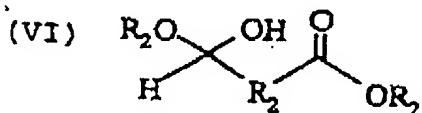
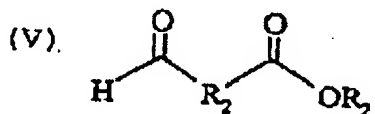
Claim 21 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein at least one oxocarboxylic acid derivative is an oxocarboxylic ester (III) or a carboxylic ester hemiketal (IV),



, or both,

where wherein each instance of R₂ may be identical or different.

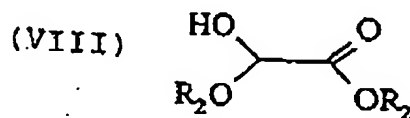
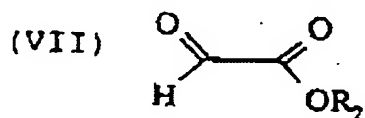
Claim 22 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein at least one oxocarboxylic acid derivative is an aldehydecaboxylic ester (V) or a carboxylic ester hemiacetal (VI),



, or both,

where wherein each instance of R₂ may be identical or different.

Claim 23 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein at least one oxocarboxylic acid derivative is a glyoxylic ester (VII) or a glyoxylic ester hemiacetal (VIII),



, or both,

where wherein each instance of R₂ may be identical or different.

Claim 24 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein at least one oxocarboxylic acid derivative is glyoxylic methyl ester methyl hemiacetal.

Claim 25 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19 wherein the molar ratio of aminotriazine to the oxocarboxylic acid derivative is 1:2 to 1:4.

Claim 26 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein the reaction is carried out in a solvent; ~~such as water, alcohol or an inert solvent.~~

Claim 27 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein the reaction takes place at pH = 3 to 10.

Claim 28 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein the condensation product is soluble both in organic solvents and also in water.

Claim 29 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein it is formed by secondary reactions which occur at the same time as or following the primary reaction or both.

Claim 30 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 29, wherein the secondary reaction is an etherification, a transesterification, an esterification, a transesterification, an amidation or a hydrolysis.

Claim 31 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 29, wherein the secondary reaction is carried out following the primary reaction.

Claim 32 (Currently Amended): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein, after the reaction, ~~syrup-like~~ solutions with a content of reaction product of from about 5 to 95% by weight, ~~such as from about 25 to 75% by weight, such as from about 30 to 60% by weight, of the reaction product~~ are obtained.

Claim 33 (Currently Amended): A method for the production of formaldehyde-free aminotriazine condensation products as claimed in claim 19, wherein an aminotriazine, ~~such as melamine~~, is reacted in a liquid phase with at least one oxocarboxylic acid derivative.

Claim 34 (Currently Amended): The method as claimed in claim 33, wherein, after the primary reaction, a derivatization, ~~in particular an etherification, a transesterification, an esterification, a transesterification, an amidation or a hydrolysis~~, is carried out.

Claim 35 (Previously Presented): The method as claimed in claim 33, wherein the reaction product is at least one selected from the group consisting of concentrated, filtered off, dried, further condensed by increasing the temperature and cured.

Claim 36 (Previously Presented): The method as claimed in claim 34, wherein the reaction product is at least one selected from the group consisting of concentrated, filtered off, dried, further condensed by increasing the temperature and cured.

Claim 37 (New): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, wherein the formaldehyde-free aminotriazine condensation product is a melamine condensation product.

Claim 38 (New): The formaldehyde-free aminotriazine condensation product as claimed in claim 19, produced by the reaction of melamine with the at least one oxocarboxylic acid derivative.

Claim 39 (New): The formaldehyde-free aminotriazine condensation product as claimed in claim 26, wherein the solvent is water, alcohol or an inert solvent.

Claim 40 (New): The formaldehyde-free aminotriazine condensation product as claimed in claim 32, wherein, after the reaction, solutions with a content of reaction product of about 25 to 75% by weight of the reaction product are obtained.

Claim 41 (New): The formaldehyde-free aminotriazine condensation product as claimed in claim 32, wherein, after the reaction, solutions with a content of reaction product of about 30 to 60% by weight of the reaction product are obtained.

Claim 42 (New): The method as claimed in claim 33, wherein melamine is reacted in the liquid phase with the at least one oxocarboxylic acid derivative.

Claim 43 (New): The method as claimed in claim 34, wherein the derivatization is selected from the group consisting of an etherification, a transesterification, an esterification, an amidization and a hydrolysis.